



CONSTRUCTION DOCUMENTS

For most single-family dwelling, a registered architect or professional engineer is not required, however for special situations they may be the best answer for your particular need. Depending on the complexity of the design, the County however may require portions of the construction documents be “sealed” by an engineer or architect, collectively refereed to as “registered design professional”.

There are typically three construction documents necessary for a new house:

1. Plat,
2. Soil report,
3. Construction Drawings:
 - A. Footing and Foundation plan,
 - B. Basement plan.
 - C. First floor plan,
 - D. Second floor plan,
 - E. Attic plan,
 - F. Roof plan,
 - G. Elevations,
 - H. Wall sections,
 - I. Details,
 - J. I-Joist layout,
 - K. Truss layout,
 - L. Truss detail sheets.

Other structures (detached garages, decks, etc.) may only require two documents: the plat and the construction drawings. See Table for which situations require a soil report.

Either the homeowner or the contractor may request permits. In either case the requirements are the same. For residential permitting, two sets of the construction documents must be submitted at the time of application.

A brief description of some of the requirements listed on the Requirements for Permit Submittals and the Chesterfield County Residential Plan Checklist used by plan reviewers follows:

1. General requirements for all construction drawings:
 - A. Numbered – Every sheet of the house plan should be numbered.
 - B. Scale – New house plans should be drawn to architectural scale, typically 1/4”, 3/16” or 1/8”. Additions and other work do not require the drawings to be in scale, but we recommend that the drawings or

sketches be done on grid paper and to relative scale for easier communication of ideas.

- C. Legible - The drawings should be neat and legible. They do not have to be computer drawn, but they should be void of handwritten notes.
 - D. Options -Unused options should not be included in the construction documents. Either cross them out, or remove the sheet(s) from the set of documents.
 - E. Orientation - The drawings should all be in the same orientation on the sheets.
 - F. Non-structural details - Chesterfield County plan reviewers do not review the plans for mechanical, electrical or plumbing (MEP) details. Therefore please do not submit MEP drawings. The field inspectors check for those issues. Also please do not submit cabinetry, stair, or non-structural details, as they too are not reviewed either.
2. Plan Views: footing and foundation, first floor, second floor, attic and roof:
- A. All plans should show perimeter and interior dimensions.
 - B. Room names should be on each plan.
 - C. All interior load-bearing walls should be cross-hatched.
 - D. All beams, including garage door headers, should be identified. All beams carrying more than 4000# require the column to be identified on each end.
 - E. The size and direction of all floor joists, ceiling joists, rafters should be shown. Examples:
 - 1. Nominal lumber: 2x8 SYP @ 16" o.c.
 - 2. I-joists: Truss Joist, Series 230, 11-7/8", 16" o.c.
 - F. Braced wall panel method must be clearly listed on the first floor plan.
 - G. Full height, two-story walls (i.e. walls over 12 feet tall) must be engineered by a registered design professional.
 - H. If the house is less than 5 feet from the property line, the exposed side must have a one-hour fire rated wall assembly.
 - I. Attic plan is required for all attics accessed by a permanent stair.
 - J. Any space intended for "future" use should be marked accordingly.
 - K. Each rafter or truss must be individually drawn to show bearing. All overbuilt roofs should be identified.
 - L. For all submittals of structures with truss roofs, the truss layout and individual truss detail sheets must be provided at the time of submittal. The truss detail sheets should be individually sealed by the registered design professional.
3. Sections: At least one "through-house" section is required. The section view should be cut from the front of the house to the rear of the house, and be done in such a location to show any non-standard section, such as a two-story family room or a room with a vaulted ceiling. If there are multiple complicated spaces, separate I sections shall be provided to show all of the structure. Section cuts should be referenced on the plan views.

4. Elevations: For new houses, elevations are required for all four sides of the house. For additions, detached garages, etc. two elevations are required: from the front and side. The elevations should show the exterior finishes. If the house has a basement, the elevations should show approximate grade changes, doors and windows.